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a slider body;

first and second rails extending in a longitudinal direction along the slider body where
[the] leading edges of said rails are spaced from a leading edge of the slider body;

a first structure having a first depth and extending from a leading edge of the body to the
leading edges of the first and second rails and between the first and second rails;

a second structure having a second depth disposed adjacent to said first structure and
between said first and second rails, said second depth being lower than said first depth; and

wherein said first structure extends over one-third of a length of the slider body from the
leading edge of the slider body.

In accordance with 37 C.F.R. § 1.121, a clean version of claims 1, 11, and 21 is attached
to the present Amendment.

REMARKS

After entering of the proposed amendment set forth above, claims 1-30 remain in this
application. Claims 1, 11, and 21 have been amended to correct minor informalities. Also, the
title and abstract have been amended.

Rejections under 35 U.S.C. § 112, Second Paragraph

Claims 1-5, 11-15, and 21-25 were rejected under 35 U.S.C. § 112, second paragraph as
failing to distinctly claim the invention. Claims 1, 11, and 21 have been amended to correct an
error in antecedent bases. In view of these amendments, reconsideration and withdrawal of the
rejection of claims 1-5, 11-15, and 21-25 under 35 U.S.C. § 112, second paragraph is respectfully
requested.

Rejections under 35 U.S.C. § 102(e)

Claims 1-30 were rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 6,144,529 to Wada et al. (“Wada”). In discussing the Hunt reference, Applicant is not making a representation that this reference has a filing date that predates the date of invention for the present application. It is also noted that the present application is assigned to a subsidiary of the assignee of the Wada patent.

The present invention pertains to a multiple level surface configuration for a subambient pressure air bearing slider. More particularly, an improved slider design is presented including a first structure that extends between the rails of the slider body and over at least the first third of the slider body. A second structure having a depth lower than the depth of the first structure is disposed adjacent to the first structure and between the rails.

Looking specifically to claim 1, Applicant claims a unique design to the body of a slider that is not in any way suggested in Wada. The invention requires that the body be comprised of two structures of two differing depths; a relatively shallow front extending from the leading edge of the slider body, and secondly, a relatively deeper structure adjacent to the first structure. Specifically, the body design requires “a first structure having a first depth and extending from a leading edge of the body to the leading edges of the first and second rails and between the first and second rails. Secondly, the body requires “a second structure having a second depth disposed adjacent to said first structure and between said first and second rails, said second depth being lower than said first depth.” Wada on the other hand only has one continuous depth along the slider body, which corresponds to the generation of only one negative pressure bearing area along the body.

Applicant’s novel design greatly increases the negative pressure generation over the

structure, and empirically has been seen to counterbalance positive pressure generation more efficiently than alternate designs such as Wada. For the following reason, the Applicant respectfully submits that Wada in no way teaches or reflects the invention presently claimed.

In view of the above, reconsideration and withdrawal of the rejection of claims 1-30 under 35 U.S.C. § 102(e) is respectfully requested.


CONCLUSION

The Applicant respectfully submits that this application is in condition for allowance. A Notice of Allowance is earnestly solicited. The Examiner is invited to contact the undersigned at (408) 975-7500 to discuss any matter concerning this application.

The Office is hereby authorized to charge any additional fees or credit any overpayments under 37 C.F.R. § 1.16 or § 1.17 to Deposit Account No. 11-0600.

Respectfully submitted,
KENYON & KENYON

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By: 
Shawn W. O'Dowd
Reg. No. 34,687

KENYON & KENYON
333 West San Carlos St.
San Jose, CA 95110
(408) 975-7500 telephone
(408) 975-7501 facsimile
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Marked-Up Version of Amended Paragraphs

Abstract of the Disclosure

A [An improved] A slider design is presented including a first structure that extends between the rails of the slider body and over at least the first third of the slider body. A second structure having a depth lower than the depth of the first structure is disposed adjacent to the first structure and between the rails. The present slider design provides a [stiffer] stiff air bearing that has a near-constant flying height over various radii of the moving recording medium. The present slider design also provides [improved] exceptional lift-off in a ramp unloading operation.

Clean Version of Amended Paragraphs

Abstract of the Disclosure

A slider design is presented including a first structure that extends between the rails of the slider body and over at least the first third of the slider body. A second structure having a depth lower than the depth of the first structure is disposed adjacent to the first structure and between the rails. The present slider design provides a stiff air bearing that has a near-constant flying height over various radii of the moving recording medium. The present slider design also provides exceptional lift-off in a ramp unloading operation.

Clean Version of Amended Claims

1. (Amended) A slider comprising:

a slider body;

first and second rails extending in a longitudinal direction along the slider body where leading edges of said rails are spaced from a leading edge of the slider body;

a first structure having a first depth and extending from a leading edge of the body to the leading edges of the first and second rails and between the first and second rails;

a second structure having a second depth disposed adjacent to said first structure and between said first and second rails, said second depth being lower than said first depth; and

wherein said first structure extends over one-third of a length of the slider body from the leading edge of the slider body.

11. (Amended) A head suspension assembly comprising:

a flexure; and

a slider coupled to said flexure, said slider including

a slider body;

first and second rails extending in a longitudinal direction along the slider body where leading edges of said rails are spaced from a leading edge of the slider body;

a first structure having a first depth and extending from a leading edge of the body to the leading edges of the first and second rails and between the first and second rails;

a second structure having a second depth disposed adjacent to said first structure and between said first and second rails, said second depth being lower than said first depth; and

wherein said first structure extends over one-third of a length of the slider body from the leading edge of the slider body.

21. (Amended) A disk drive comprising:

a recording medium adapted to be rotated at a given velocity;

a flexure;

a slider coupled to said flexure and adapted to fly above said recording medium when rotated, the slider including

a slider body;

first and second rails extending in a longitudinal direction along the slider body where leading edges of said rails are spaced from a leading edge of the slider body;

a first structure having a first depth and extending from a leading edge of the body to the leading edges of the first and second rails and between the first and second rails;

a second structure having a second depth disposed adjacent to said first structure and between said first and second rails, said second depth being lower than said first depth; and

wherein said first structure extends over one-third of a length of the slider body from the leading edge of the slider body.